

REMARKS

General Remarks

With this Amendment, Applicants cancel previously pending Claims 1-46, 8-9, 11-12, 15-28, 30, 32-33, 35-36, 39-52, 54, 56-57, 59-60, 64-82, 88, 91-105, 107-123, 125-141, and 143-167, without prejudice as to the furthest prosecution of these claims in this or a subsequent application. Applicants also add new Claims 168-193. No new matter is added. Therefore, Claims 168-193 are all the claims currently pending in the present application.

Interview. A personal interview was conducted with the Examiner and with Supervisory Examiner, Ms. Seema Rao, on August 18, 2004. A Statement of the Substance of the Interview follows.

Statement of the Substance of the Interview

At the personal interview conducted on August 18, 2004, the general concept of Applicants' invention was discussed and Applicants' representatives proposed revising the claims.

Request for Examiner Interview

Applicants request a personal interview with the Examiner prior to the issuance of any subsequent office actions. Applicants' representative, the undersigned attorney, can be contacted at the number listed below to schedule an interview.

New Claims and New Figure

With this Amendment, Applicants add new Claims 168-193 in order more fully to cover various aspects of Applicants' invention as disclosed in the specification. Claims 168-193 are fully supported in the originally-filed specification.

With this Amendment, Applicants also add new Figure 12 to illustrate an exemplary embodiment of the methods recited in new Claims 168-173 and 182-185. This new figure is fully supported in the originally-filed specification, for example at pages 22, 25, 26, and 31. In view of the addition of this new figure, Applicants also amend the specification, as shown, to make reference to the illustrated steps at the portions of the original specification wherein those steps are supported.

Previously Cited Prior Art

In the current Office Action of June 23, 2004, the Examiner cites Hirohashi et al., U.S. Patent No. 5,600, 471 (“Hirohashi”) and Dahlman et al., U.S. Patent No. 5,896,368 (“Dahlman”) against previously pending Claims 4, 6, 8-9, 11-12, 15-16, 19-20, 23, 28, 30, 32-33, 35-36, 39-40, 43-44, 47, 52, 54, 59-60, 64, 67-68, 71, 74-79, 92-94, 99-105, 108-109, 112, 117-123, 126-127, 103-131, 135-141, 144-145, and 148-167. (Office Action p. 4 and 10).

Regarding these references, Applicants respectfully submit that the current Claims 168-206 are patentable over any reasonable combination of Hirohashi and Dahlman for at least the following reasons.

A. Hirohashi, generally. Hirohashi is generally directed to an optical wireless transmission system which provides short-distance communication capabilities such as for linking a personal computer to a LAN. (Abstract). Hirohashi describes that when data is transmitted optically, in successive packets separated by time intervals in which there is no data communication, a problem arises that during the interval between the successive packets, the AGC circuit allows the gain factor for the receiving circuit to increase to its maximum value. (Col. 10, Ins. 8-17). “Thus, at the start of receiving [the next successive data packet], during an

interval that is determined by the time constant of the AGC circuit, excessive amplification will be applied to the received signal, so that saturation of the receiving circuit may occur.” (Col. 10, lns. 17-22). In order to solve this problem, according to one embodiment of Hirohashi, a periodic signal, as a pilot signal, is inserted into the idle intervals between successive data packets, as illustrated in Figures 5A-5C. (Col. 10, lns. 23-37).

B. Dahlman, generally. Dahlman is generally directed to a multi-code compressed transmission mode for CDMA systems. (Abstract). According to Dahlman, multiple spreading codes are used to spread a data stream associated with a single frame such that the coded information only fills part of the frame, thus leaving an idle part. (Col. 3, ln. 62 through col. 4, ln. 1). A mobile receiver can then use this idle period to tune to one or more different frequencies to take measurements to implement handovers. (Col. 4, lns. 20-24). These idle periods may be used by the receiver to scan other frequencies (col. 9, ln. 1) or can be used for handling call handover (col. 9, lns. 30-32).

C. Applicants respectfully submit that neither Hirohashi nor Dahlman teach or suggest inserting a pilot signal, such that an end of the pilot signal is contiguous with a beginning of a data transmission after the vacant period, as recited, for example, in Claim 168. (See also Claims 171, 174, 177, 180, 181, 182, 184, 186, 189, 192, and 193). While, as noted above, Hirohashi describes the inserting of pilot signals in an idle period between data communications, there is no disclosure or suggestion in Hirohashi of inserting a pilot signal, such that a beginning of a data transmission after the vacant period is contiguous with an end of the pilot signal. In other words, there is no disclosure or suggestion of there being no transmission gap between an

end of the pilot signal and a beginning of a data transmission before the vacant period. Again, Dahlman fails to teach or suggest providing any pilot signal.

D. Applicants respectfully submit that Claims 169, 170, 172, 173, 175, 176, 178, 179, 183, 185, 187, 188, 190, and 191 are patentable at least by virtue of their dependence on Claims 168, 171, 174, 177, 182, 184, 186, and 189 and by reason of the additional limitations set forth therein.

E. In view of at least the above-presented arguments, Applicants respectfully submit that Claims 168-193 are patentable over the previously-cited prior art, and respectfully request the allowance of Claims 168-193.

Conclusion

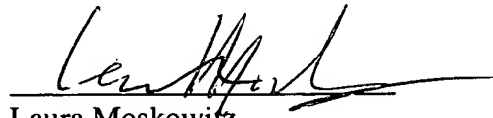
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/287,570

Q53866

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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